

ABSTRACT

A solid-electrolyte secondary battery is provided which comprises a positive electrode, negative electrode and a solid electrolyte provided between the electrodes. The solid electrolyte contains as a matrix polymer a fluorocarbon polymer of 550,000 in weight-average molecular weight (Mw). The fluorocarbon polymer having a weight-average molecular weight of more than 550,000 shows an excellent adhesion to the active material layers of the positive and negative layers. Therefore, the high polymer solid (or gel) electrolyte adheres to the active material layers of the electrodes with a sufficient adhesive strength. From the standpoint of the coating viscosity, a fluorocarbon polymer having a weight-average molecular weight (Mw) over 300,000 and under 550,000.

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世界知的所有権機関 国際事務局 特許協力条約に基づいて公開された国派出願



(51) 国際特許分類6 H01M 10/40, 4/02 (11) 国際公開番号 A1 WO99/56336

(43) 国際公開日

1999年11月4日(04.11.99)

(21) 国際出願番号

PCT/JP99/02155

(22) 国際出願日

1999年4月22日(22.04.99)

(30) 優先権データ

特願平10/117509

1998年4月27日(27.04.98)

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添付公開書類

国際調査報告書

(54)Title: SOLID ELECTROLYTIC SECONDARY BATTERY

(54)発明の名称 固体電解質二次電池

(57) Abstract

A solid electrolytic secondary battery comprising a positive electrode, a negative electrode and a solid electrolyte interposed between the electrodes, wherein the solid electrolyte contains, as matrix polymer, fluorine polymer having a weight-average molecular weight (Mw) of 550,000 or larger, which polymer delivering an excellent adhesiveness to the active material layers of the positive and negative electrodes, thereby enabling a polymer sold electrolyte or a gel electrolyte to be bonded to electrode active material layers with a sufficient adhesive strength. In view of a paint viscosity, fluorine polymer having a weight-average molecular weight (Mw) of not smaller than 300,000 and less than 550,000 may be jointly used.

